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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,796	10/17/2000	Craig L. Ogg	39477/RRT/S850	3181
23363 7590 09/20/2007 CHRISTIE, PARKER & HALE, LLP PO BOX 7068 PASADENA, CA 91109-7068			EXAMINER [REDACTED]	AUGUSTIN, EVENS J
		ART UNIT [REDACTED]	PAPER NUMBER 3621	
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	09/690,796	OGG, CRAIG L.
	Examiner Evens Augustin	Art Unit 3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 July 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1, 5-10, 17, 22, 42, 50-52, and 55-59 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1, 5-10, 17, 22, 42, 50-52 and 55-59 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/03/07</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgements

1. This is in response to an amendment filed on 03 July 2007. Claims 1, 5-10, 17, 22, 42, 50-52, 55 and 57 have been amended. Claims 61, 92, 107-108, 110, and 113-114 have been cancelled. Claims 1, 5-10, 17, 22, 42, 50-52, and 55-59 are pending.

Response to Arguments

2. The United States Patent and Trademark Office has fully considered the applicant's arguments filed on 03 July 2007, but has not found those arguments to be persuasive.

Argument 1:

3. Prior Art does not teach the aspects of "a plurality of cryptographic modules, each of the plurality of cryptographic modules for authenticating, processing value for the VBI, and generating indicia data for the plurality of users, wherein before each of the authentication, processing value, and generating indicia data for a given user is performed, an available cryptographic module retrieves the data record for the given user directly from the database."

Response 1:

4. The prior art by Lewis et al. teach the aspects of server authentication modules (emphasis on plurality) (col.4, ll.21).
5. Additionally, the system of the present invention can be considered as a combination of several components or modules which include: UI (user interface), Security, Printing, Financial Transactions, Communications, and Database Management. Each of these is designed to be in compliance with industry standards (col.13, ll. 65-67 and col.14, ll.1-4).

The printing generates indicia (fig. 4a and 4b, col. 12, ll.51-62, col. 31, ll. 25-44). The indicia are also value-bearing items such as stamp or postage items showing their monetary value (fig. 4a and 4b). The cryptographic module 14 will retrieve the appropriate values from the SQL master database 305 and fill in the remaining values (col.31, ll.30-32).

Application stands finally rejected.

Claim Interpretation

6. In determining patentability of an invention over the prior art, the USPTO has considered all claimed limitations, and interpreted as broadly as their terms reasonably allow. Additionally, all words in the claims have been considered in judging the patentability of the claims against the prior art.
7. It should also be noted that, in the office action that:
 - A. Items in the rejection that are in quotation marks are claimed language/limitations
 - B. Passages in prior art references may be mere rephrasing/rewording of claimed limitations, but the implicit/explicit meaning of the references vis-à-vis the claimed limitation remains intact.
 - C. Functional recitation(s) using the word “for” or other functional terms (e.g. “for monitoring operation of a self service terminal application exceeded by a self service terminal coupled to the computer” as recited in claim 8) have been considered but given less patentable weight¹ because they fail to add any steps and are thereby

¹ See e.g. *In re Gulack*, 703 F.2d 1381, 217 USPQ 401, 404 (Fed. Cir. 1983)(stating that although all limitations must be considered, not all limitations are entitled to patentable weight).

regarded as intended use language. To be especially clear, the Examiner has considered all claim limitations. However the A recitation of the intended use of the claimed invention must result in additional steps. See *Bristol-Myers Squibb Co. v. Ben Venue Laboratories, Inc.*, 246 F.3d 1368, 1375-76, 58 USPQ2d 1508, 1513 (Fed. Cir. 2001) (Where the language in a method claim states only a purpose and intended result, the expression does not result in a manipulative difference in the steps of the claim.).

- D. Limitations that recite the purpose of a process or the intended use of a structure are generally not given any patentable weight. Patentable weight is therefore given to **actual** process steps or structural limitations.
- E. Word(s) that are separated by “/” are being examined as being synonymous or equivalent
- F. The USPTO interprets claim limitations that contain statement(s) such as “*if, may, might, can, could, when, potentially, possibly*”, as optional language (this list of examples is not intended to be exhaustive). As matter of linguistic precision, optional claim elements do not narrow claim limitations, since they can always be omitted (*In re Johnston*, 77 USPQ2d 1788 (Fed. Circ. 2006)). They will be given less patentable weight, because language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.
- G. Independent claims are examined together, since they are not patentable distinct. If applicant expressly states on the record that two or more independent and distinct

inventions are claimed in a single application, the Examiner may require the applicant to elect an invention to which the claims will be restricted.

- H. Any official notices taken by the USPTO that are not adequately traversed by applicant will be taken to be admitted prior art.
- I. The USPTO interprets common computer related words that are not lexicographically defined, in accordance to Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997². The USPTO also uses published patent applications and issued patents as well, for meanings of common computer related words that are not lexicographically defined. Accordingly:
 - a. **Module:** n. 1. In programming, a collection of routines and data structures that performs a particular task or implements a particular abstract data type. Modules usually consist of two parts: an interface, which lists the constants, data types, variables, and routines that can be accessed by other modules or routines, and an implementation, which is private (accessible only to the module) and which contains the source code that actually implements the routines in the module. See also abstract data type, information hiding, Modula-2, modular programming. 2. In hardware, a self-contained component that can provide a complete function to a system and can

² Based upon Applicants' disclosure, the art of record, and the knowledge of one of ordinary skill in this art as determined by the factors discussed in MPEP §2141.03 (where practical), the Examiner finds that the *Microsoft Press Computer Dictionary* is an appropriate technical dictionary known to be used by one of ordinary skill in this art. See e.g. *Altiris Inc. v. Symantec Corp.*, 318 F.3d 1363, 1373, 65 USPQ2d 1865, 1872 (Fed. Cir. 2003) where the Federal Circuit used the *Microsoft Press Computer Dictionary* (3d ed.) as "a technical dictionary" to define the term "flag." See also *In re Barr*, 444 F.2d 588, 170 USPQ 330 (CCPA 1971)(noting that its appropriate to use technical dictionaries in order to ascertain the meaning of a term of art) and MPEP §2173.05(a) titled 'New Terminology.'

be interchanged with other modules that provide similar functions. The PTO will interpret module as both hardware component and a collection of routines and data structures that performs a particular task or implements a particular abstract data type

- b. **Table:** n. 1. In programming, a data structure usually consisting of a list of entries, each entry being identified by a unique key and containing a set of related values. A table is often implemented as an array of records, a linked list, or (in more primitive languages) several arrays of different data types, all using a common indexing scheme. See also array, list, record1. 2. In relational databases, a data structure characterized by rows and columns, with data occupying or potentially occupying each cell formed by a row-column intersection. The table is the underlying structure of a relation. See also relational database. 3. In word processing, desktop publishing, and HTML, a block of text formatted in aligned rows and columns.
- c. **Recovery:** n. The restoration of lost data, or the reconciliation of conflicting or erroneous data, after a system failure. Recovery is often achieved using a disk or tape backup and system logs. See also backup.
- d. **Decision Support System:** n. A set of programs and related data designed to help with analysis and decision making. A decision support system provides more help in formulating decisions than a management information system (MIS) or an executive information system (EIS). It includes a database, a body of knowledge about the subject area, a "language" used to formulate problems and questions, and a modeling program for testing alternative decisions. Compare executive information system, management information system.

- e. **Simple Mail Transfer Protocol:** n. A TCP/IP protocol for sending messages from one computer to another on a network. This protocol is used on the Internet to route e-mail. See also communications protocol, TCP/IP. Compare CCITT X series, Post Office Protocol. Acronym: SMTP

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States. . . .

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 6-10, 17, 22, 42, 50-52, and 55-59 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al. (U.S 6233565).

10. As per claims 1, 6-10, 17, 22, 42, 50-52, and 55-59, Lewis et al. disclose an invention that comprises of the following:

A. Interfacing with one or plurality of client system (col. 6, lines 49-56, col. 5, lines 30-32) (“**a client system for interfacing with a plurality of users**”)

B. A server communicating with client(s) over the internet (col. 5, lines 33-37). The server system can also be a combination of servers as shown in figure 2 and col. 7,

lines 35-36 (“**a server system for communicating with the client system over a communication network**”)

- C. Server comprising a database (col. 5, lines 34) for retrieving customer/user information (col. 14, lines 55-61), the server is a Postal Secure Device (col. 13, lines 36-37), and therefore the database that resides in the server is secure (col.31, ll.30-32) (“**a secure database remote from the users including a data record for each of the users**”)
- D. Server module includes services such as authentication (col. 24, lines 64, col. 28, lines 13-19), indicium generation (col. 28, 29-31) – Part of the indicium generation is to process the value/rate of indicium (col. 31, lines 30-32, lines 41-44). The services are performed by a collection of routines and data structures that performs a particular task or implements a particular abstract data type. For example, system includes an authentication (col. 4, lines 20-23), a hash module for performing a hash algorithm based on an input data (col. 5, lines 12), encryption/decryption module for encrypting and decrypting at least one of the client private key and client public key based on said hash (col. 5, lines 15-17) – Invention also includes that the module is an executable program (col. 33, line 7) – (“**a plurality of cryptographic modules, each of the plurality of cryptographic modules for authenticating, processing value for the VBI, and generating indicia data for the plurality of users, wherein before each of the authentication, processing value, and generating indicia data for a given user is performed, the respective cryptographic module retrieves the data record for the given user directly from the database**”)

- E. Each transaction/transaction request is recorded/stored in the transaction database (col. 4, lines 28-30). The current transaction/request is the first set of transaction. (“**database stores a first set of one or more last database transactions**”) – During each transaction for postage, the user’s account is debited for the transaction amount/postage (col. 12, lines 23-30). If the postage exceeds the available amount (second set of previous transactions), an insufficient postage/funds error is given to the user, thereby preventing the current transaction to take place (“**prevents further database transactions if the second set of one or more last transaction**”) (col. 19, lines 33-36) (there has to be a comparison between the amount requested/first transaction and the available amount/previous transaction in order to determine whether or not the amount is sufficient; retrieving the sets of data is also inherent) (“**modules stores a second set of one or more last database transactions for comparison with the first set of one or more last database transactions stored in the database to verify each database transaction**”)
- F. Updating record in a database (col. 11, lines 37, col. 16, lines 40, col. 17, line 31, 59, col. 18, line 7, col. 36, line 15) (“**updating, and storing back in the database, the updated data record for the given user after generating indicia data for the given user**”)
- G. The prior art contains Structured Query Language/relational database (col. 14, lines 55-61), which necessarily has tables (“**the database stores a table including the respective information about a last transaction and a verification module to**

compare the information saved in the module with the information saved in the database”)

- H.** Periodic backup of the data stored in the database (col. 19, lines 27-32), in a log server (col. 12, lines 63-67 – see also table I, in column 7-10) (“**back up database server connected to the server system for periodically backing up the data stored in the database in a back up database”**”)
- I.** Server module to encrypt sensitive information in the servers (col. 24, lines 54-67) – (“**cryptographically protected transaction log stored in the back up database”**”)
- J.** Determining the validity of transaction data (col. 25, lines 20-22) (“**data validation...**”, the server automatically records various data and stores them on the log server (col. 35, lines 52-54) – Implicitly, data can automatically be recovered (“**auto-recovery subsystem...**”)
- K.** If a module/computer code enters the Error State, the module will no longer perform cryptographic functions (col. 34, lines 2-6, col. 24, lines 10-15) (“**a computer executable code for detecting errors and preventing a compromise of data or critical cryptographic security parameters as a result of the errors”**”)
- L.** A Postal security device/subsystem (col. 3, line 59), which resides in Remote Service Provider (RSP) server (col. 3, lines 65-66) (“**one or more of a postal server subsystem, a provider server subsystem”**”), a transaction/commerce server/subsystem taking place over the internet (col. 4, lines 12-16) (“**e-commerce subsystem”**”), a staging server/subsystem (col. 18, line 23) (“**staging subsystem”**”), client support functions (col. 21, line 63) (“**a client support subsystem”**”) - On a

periodic basis (e.g., 12:00 midnight every day) the server 4 system can run an agent that reviews all log database tables that have changed during the prior 24-hour period. Any changes that have been made are analyzed and matched to the customer record found in the Master Database 305. Purchase, spoilage, and refund information will be marked for a batch transmission to TPS (col. 37, lines 54-60) – In that sense, the system helps with analysis and decision making, and is therefore a Decision Support, System (Per above definition) (“**a decision support subsystem**”), E-mail capability (col. 11, lines 44), in a TC/IP environment (col. 5, lines 59-62) – SMPT is inherent (“**a SMTP subsystem**”), filter out traffic, except to a particular address (address matching) (col. 8, lines 26-27) (“**an address matching service subsystem**”), Secure Socket layer for securing transactions (col. 14, lines 38-39, col. 15, lines 45, col. 29, line 60) (“**a SSL proxy server subsystem**”) and a web server (col. 7, line 36, col. 8, line 12, col. 11, line 31) (“**and a web server subsystem**”)

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (U.S 6233565), in view of Bosen et al. (U.S 5060263).

As per claim 5, the invention has previously been disclosed.

13. Although Lewis et al. teaches the aspect of obtaining a password from the user (col. 2, line 35, col. 5, line 12), Lewis et al. did not explicitly describe asynchronous dynamic password. However, Bosen et al. teaches the aspect of asynchronous dynamic password (column 2, lines 1-14, col. 4, lines 6-14). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to construct a system that would employ asynchronous dynamic password. According to Bosen et al., one skilled in the art would have been motivated to do because asynchronous dynamic password reduces the number of keystrokes required of its users, and yet provides a much higher level of security than previous systems (col. 4, lines 9-11).

Conclusion

14. **THIS ACTION IS MADE FINAL.** Any new ground(s) of rejection is due to the applicant's amendment. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evens Augustin whose telephone number is 571-272-6860. The examiner can normally be reached on Monday thru Friday 8 to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on 571-272-6779.

/Evens J. Augustin/
Evens J. Augustin
September 15, 2007
Art Unit 3621



BRADLEY BAYAT
PRIMARY EXAMINER